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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,570	11/19/2001	Manfred Bartz	CYPR-CD01167M	1199

7590

05/30/2003

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EXAMINER

DIMYAN, MAGID Y

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 05/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/989,570

Applicant(s)

BARTZ ET AL.

Examiner

Magid Y Dimyan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 11 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Acknowledgement*

Receipt is acknowledged of the Amendment in Response to First Office Action, filed on April 7, 2003, the Preliminary Amendment filed on February 19, 2003, as well as the Transmittal of Formal Drawings, filed on April 11, 2003. It is also acknowledged that the Applicants have amended independent claims 1, 10 and 17, amended dependent claim 2, and added one new independent claim (claim 27).

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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2. Claims 1, 3, 4, 5, 6, 7, 8, 9, 17, 19, 20, 21 22, 23, 24, 25, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Zizzo (Pub. No. US 2002/0188910).

3. Referring to claims 1, 3, 4, 5 and 6, Zizzo discloses a multi-faceted method and system for front-end hardware IC designers who design complex core (i.e., modules and resources) base System on a Chip. The method and system makes use of a graphical user interface (GUI) to display module information (availability, specifications, icons, etc) in response to a module being selected. See Figs. 8A, 8B and other figures as well as page 6, paragraphs 0052 – 0054 and page 10, paragraph 0075 for a recitation of the inventions claimed. The method of placement and highlighting the modules used in the design is also disclosed in the invention. See Fig. 3 for a flow chart of the disclosure, illustrating and describing the process of selecting and managing the components (i.e., modules/resources) in an IC design. See also paragraphs 0048 - 0056, starting on page 6, which teach the inventions claimed herein. As per claim 7, see page 3, paragraph 0031 and page 6, paragraph 0052. Referring to claims 8 and 9, see Figs. 8C and 7, respectively. As per claims 17, 19 and 20, see Fig. 2, as well as the disclosures recited above, which teach the same inventions as claimed. Referring to claims 21 and 22, see page 4, paragraph 0037, which teach that XML can be used as a primary data interface between the various components of the system. Placement of these components is well described in the disclosure. See also Fig. 9. As per claims 23, 24, 25, 26 and 27, see page 5 (paragraph 0048), Figs. 8A and 8C, Fig. 7, and Fig. 9, respectively.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 11, 12, 13, 14, 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zizzo in view of Comeau et al (Pub. No. US 2002/0099863). Referring to these claims, the teachings of Zizzo are cited in some detail above (also see their disclosure). It should also be noted that Zizzo teaches the generation of the appropriate source code files for realizing the circuit blocks/components (see Abstract) as well as the data sheets for the circuit (see page 3, paragraph 0031). However, Zizzo does not disclose the use of an application programming interface (API), or the use of an interrupt vector table having a call to an interrupt service routine for the module. Comeau et al, on the other hand, recite an apparatus that supports processors executing interpreted language applications that make use of API (page 3, paragraph 0043), an interrupt vector table (page 3, paragraph 0035) and an interrupt service routine that may be tied to threads under the control of the scheduler (page 4, paragraph 0049). See also Figs. 3 – 5 as well as various portions of their disclosure. Since the use of API and an interrupt vector table having a call to an interrupt service

routine for the circuit module would greatly facilitate the circuit design, thus cutting the design cycle time, it would therefore be obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Zizzo and Comeau et al to obtain the same inventions as claimed in these claims

### ***Response to Amendment***

5. Applicant's arguments filed April 7, 2003 have been fully considered but they are not persuasive. The Applicants argue that claims 1, 3 – 9, 17, and 19 – 26 should be allowable because Zizzo fails to disclose each element of independent claim 1. The Examiner respectfully disagrees. As per the applicants' arguments that Zizzo fails to disclose "a graphical user interface having a plurality of resource icons representing said resources", see Fig. 9, which sites a GUI with a plurality of resource icons. The applicants claim that an IP core, as recited by Zizzo, is not a "resource". Again, the Examiner respectfully disagrees. A resource may be interpreted as any circuit block, cell, device, etc which can be used in an IC design. Thus, an IP core can be interpreted as a "resource" in this case. As per the applicant's argument that Zizzo fails to disclose the limitation recited in claim 1 of "determining a valid position for said module in a graphical user interface ... said determination in response to a request for said valid position for said module in said graphical user interface", it should be pointed out that this feature is a characteristic of a graphical user interface (GUI). A GUI provides an interactive design utility, which enables the designer to respond to requests such as a valid position of

blocks, modules, resources, etc put forth by the GUI. It is therefore believed by the Examiner that all limitations disclosed in these claims have been anticipated by Zizzo, as cited in the First Office Action.

6. As per the applicant's arguments pertaining to claims 2, 10 – 16, and 18, the Examiner again finds these arguments unpersuasive. See (5) above, as well as Comeau et al, column 4, para 0046. Comeau et al cite an API as a "structure within a support layer that provides an abstraction of hardware so that application developers can get a consistent view and communicate with peripherals and processors across the various platforms and operating systems", i.e., any one of a selected module in a multi-module environment can be programmed, as claimed herein. Comeau also cites the use of an interrupt vector table as mentioned in the First Office Action. See also other portions of Comeau's disclosure for a recitation of the imitations as claimed herein. As per the limitation of "generating data sheets", this is a trivial and straightforward limitation, since it is obvious that data sheets are necessary to check and specify the design, and is used in most other design environments. It is therefore the conclusion of the examiner that all the limitations of these claims are rendered obvious by Zizzo in view of Comeau.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4,656,603 to Dunn discloses a schematic diagram generating system using a library of general-purpose interactively selectable graphic primitives to create special applications icons. See Abstract and Fig. 2.



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Pub. No. US 2003/0038842 to Peck et al teaches a system and method for configuring a reconfigurable I/O device by using a GUI program to display icons on a display corresponding to at least a subset of the fixed hardware resources, and to modify an appearance of respective fixed hardware resource icons as the corresponding fixed hardware resources are allocated.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magid Y Dimyan whose telephone number is (703) 308-1354. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S Smith can be reached on (703) 308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Magid Y Dimyan  
Examiner  
Art Unit 2825

myd  
May 21, 2003

  
LEIGH M. GARBOWSKI  
PATENT EXAMINER